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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/058,565	01/28/2002	Jerry Wagner	1051-015F	5446

8698 7590 01/29/2004

STANDLEY LAW GROUP LLP  
495 METRO PLACE SOUTH  
SUITE 210  
DUBLIN, OH 43017

EXAMINER

SHOSHO, CALLIE E

ART UNIT PAPER NUMBER

1714

DATE MAILED: 01/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/058,565

Applicant(s)

WAGNER, JERRY

Examiner

Callie E. Shosho

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 03 November 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 5-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 5-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s).

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

### **DETAILED ACTION**

1. All outstanding rejections are overcome by applicant's amendment filed 11/3/03.

The new grounds of rejection as set forth below are necessitated by applicant's amendment and thus, the following action is final.

### **Claim Objections**

2. Claims 9 and 14 are objected to because of the following informalities:

Claims 9 and 14 each recite that the fire-retarding composition has a Young's modulus of at least "1.0 ft-lbs.psi" and thus, the claim appears to contain two periods; in the cited phrase and at the end of the claim. However, as required under MPEP 608.01(m), except for abbreviations, periods may not be used elsewhere in a claim except at the end of the claim. It is advised that the phrase "1.0 ft-lbs.psi" is rewritten.

### **Claim Rejections - 35 USC § 112**

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 9 and 14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant

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art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claims 9 and 14 each recite that the "fire-retarding composition has a Young's modulus of at least 1.0 ft-lbs.psi". It is the examiner's position that this phrase fails to satisfy the written description requirement under the cited statute since there does not appear to be a written description requirement of the cited phrase in the application as originally filed, *In re Wright*, 866 F.2d 422, 9 USPQ2d 1649 (Fed. Cir. 1989) and MPEP 2163. Applicant has not pointed to any portion of the specification, and examiner has not found any support for this phraseology in the specification as originally filed.

**Claim Rejections - 35 USC § 103**

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 5-6, 8-11, and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunbar (U.S. 4,820,931) in view of Redondo et al. (U.S. 6,552,112) and the evidence given in Davis et al. (U.S. 6,079,502).

Dunbar discloses wet bench for clean room wherein the wet bench comprises tabletop surface and is constructed from polypropylene (col.1, lines 5-15).

The difference between Dunbar and the present claimed invention is the requirement in the claims that the wet bench comprises fire retarding polypropylene composition as presently claimed.

Dunbar discloses that the wet bench comprises polypropylene, however, there is no disclosure of fire-retarding polypropylene composition.

However, given that Dunbar disclose that one drawback of using polypropylene is that polypropylene melts and burns, it therefore would have been obvious to one of ordinary skill in the art to use fire-retarding polypropylene to construct the wet bench in order to prevent fire. Further, it is well known, as evidenced by Davis et al., that wet benches used in clean rooms are made from not only polypropylene but also fire-retarding polypropylene (col.1, lines 9-20).

Redondo et al. disclose halogen-free flame retardant polypropylene-containing composition comprising 30-80% magnesium hydroxide that is coated with anionic surfactant and which possesses surface area of  $7.1 \text{ m}^2/\text{g}$  and average particle size of 16000 Å and heterophasic, i.e. graft, copolymers of polypropylene with ethylene/propylene which comprise at least 70% polypropylene. The composition possesses modulus less than 7 MPa. It is further disclosed that the composition possesses low-smoke self-extinguishing properties (col.1, lines 24-25, col.3, line 61-col.4, line 3, col.4, lines 19-21 and 29-30, col.5, lines 25-26, col.6, lines 12-14, 17, and 39-45, col.8, lines 59-63, col.9, lines 4-8, and col.11, lines 9-25). Although there is no disclosure of the strain associated with the magnesium hydroxide, it is disclosed that the magnesium hydroxide utilized is known under the tradename Kisuma 5A which is identical to the magnesium hydroxide used in the present invention. Thus, it is clear that the magnesium hydroxide utilized in Redondo et al. intrinsically possesses all the properties, including strain, as presently claimed.

Although there is no disclosure that the composition meets FMRC standards for use in a clean room, given that Redondo et al. disclose composition identical to that presently claimed, it

is clear that such composition would intrinsically meet the FMRC standards for use in a clean room.

In light of the motivation for using flame retardant polypropylene-containing composition disclosed by Redondo et al., it therefore would have been obvious to one of ordinary skill in the art to use such composition to construct the wet bench of Dunbar in order to produce flame retardant wet bench with low-smoke self-extinguishing properties, and thereby arrive at the claimed invention.

7. Claims 5-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dunbar (U.S. 4,820,931) in view of Kanamori (U.S. 5,747,574) and Kasahara et al. (U.S. 4,734,448) and the evidence given in Davis et al. (U.S. 6,079,502).

Dunbar discloses wet bench for clean room wherein the wet bench comprises tabletop surface and is constructed from polypropylene (col. 1, lines 5-15).

The difference between Dunbar and the present claimed invention is the requirement in the claims that the wet bench comprises fire retarding polypropylene composition as presently claimed.

Dunbar discloses that the wet bench comprises polypropylene, however, there is no disclosure of fire-retarding polypropylene composition.

However, given that Dunbar disclose that one drawback of using polypropylene is that polypropylene melts and burns, it therefore would have been obvious to one of ordinary skill in the art to use fire-retarding polypropylene to construct the wet bench in order to prevent fire.

Further, it is well known, as evidenced by Davis et al., that wet benches used in clean rooms are made from not only polypropylene but also fire-retarding polypropylene (col.1, lines 9-20).

Kanamori discloses flame retarded composition comprising magnesium hydroxide that is coated with anionic surfactant and which possesses surface area of  $5 \text{ m}^2/\text{g}$  and particle size of not less than 6000 Å but not more than 10000 Å and polypropylene (col.1, lines 5-9 and 66, col.4, lines 20-21, 27-31, and 37-41, and col.6, line 4). It is disclosed that the composition comprises 60-120 parts magnesium hydroxide per 100 parts resin from which it is calculated that the composition comprises approximately 37-54% magnesium hydroxide. Although there is no disclosure of the strain associated with the magnesium hydroxide, it is disclosed that the magnesium hydroxide utilized is known under the tradename Kisuma 5B which is identical to the magnesium hydroxide used in the present invention. Thus, it is clear that the magnesium hydroxide utilized in Kanamori intrinsically possesses all the properties, including strain, as presently claimed.

Kanamori discloses that the flame-retarded composition comprises polypropylene, however, there is no explicit disclosure of specific type of polypropylene as presently claimed.

Kasahara et al., which is drawn to propylene polymer composition, disclose the use of copolymer comprising 70-95% polypropylene grafted with 5-30% ethylene-propylene copolymer wherein the copolymer has melt index of 0.1-50 g/10 min in order to produce composition with impact resistance and rigidity (col.1, lines 43-45 and 55-61, col.2, lines 10-13, and col.3, lines 36-37).

Although there is no disclosure in Kanamori or Kasahara et al. of the Young's modulus of the composition or that that the composition meets FMRC standards for use in a clean room,

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given that the combination of Kanamori with Kasahara et al. discloses composition identical to that presently claimed, it is clear that such composition would intrinsically possess Young's modulus as presently claimed as well as intrinsically meet the FMRC standards for use in a clean room.

In light of the motivation for using flame retardant polypropylene-containing composition disclosed by Kanamori and Kasahara et al., it therefore would have been obvious to one of ordinary skill in the art to use such composition to construct the wet bench of Dunbar in order to produce flame retardant wet bench, and thereby arrive at the claimed invention.

8. **NOTE:** Although the effective filing date of Davis et al. (U.S. 6,079,502) is after the filing date of the present application, as set forth in MPEP 2131.01 III, "the critical date of extrinsic evidence showing universal fact need not antedate the filing date".

Further, in the amendment filed 11/3/03, applicant argued that Redondo et al. (U.S. 6,552,112) was not applicable against the present claims given that the filing date of Redondo et al. is 1/21/00 and thus, after the filing date of the present application. However, it is noted that the effective filing date of Redondo et al. is 12/4/97 and thus Redondo et al. is a proper reference against the present claims.

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).




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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Callie E. Shosho whose telephone number is 571-272-1123. The examiner can normally be reached on Monday-Friday (6:30-4:00) Alternate Fridays Off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on 571-272-1119. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Callie E. Shosho  
Primary Examiner  
Art Unit 1714

CS  
1/23/04